

OBSCURE EXPERIMENTS WITH THE BLUEPRINTS OF LIFE

by John Mount © 2000

Professor John Tyndall (1820–1893), the noted British physicist whose forte was molecular physics, acoustics and heat radiation, performed a little-known experiment in the late 1800s.

Tyndall filled an experimental glass tube with the vapours of certain acids, iodides and nitrites. The tube was then turned on its side in a level horizontal position, and so arranged that the axis of the tube and parallel concentrated beams of electric light or focused sunlight were coincident. Adjustments were made to the focus until the vapours began to react.

Gradually, and to Tyndall's astonishment, these clouds of vapour began to coalesce, forming into coloured three-dimensional images of animals, plants and other shapes including geometric patterns of spheres, cubes and pyramids. At one stage during the experiment, Tyndall was amazed to see the swirling clouds suddenly change into the shape of a "serpent's head", and as the serpent's mouth slowly opened a long tendril of cloud emerged, forming into a perfectly shaped tongue. No sooner had this image faded than it was immediately replaced by another, this time of a perfectly formed fish complete with gills, feelers, scales and eyes.

Tyndall, commenting on the "completeness" of this figure, said:

The twoness of the animal form was displayed throughout, and no disc, coil or speck existed on one side [of the figure] that did not exist on the other.

This "twoness", as Tyndall put it, could lend some credibility to the experiment. The fact that every "twin" detail of an image is faithfully reproduced, i.e., both eyes, both ears, etc., suggests that the image is being purposely generated and is not just a coincidental occurrence like watching the clouds in the sky form rough caricatures of known objects.

Regarding the "focusing" of the beams, is it possible that, once the knack of "tuning" the beams of light had been mastered, certain images might then be pre-selected at will?

Tyndall's detractors had a field day. They pointed out that the phenomenon could easily be explained by the mechanical action of a beam of light, which would normally stir up molecules of vapour into certain shapes like globes and spindles—a

Tyndall, it must be realised, was a scientist of some repute, a Fellow and Director of the Royal Institute, President of the British Association, and disciple and confidant of Michael Faraday.

process which they said was recently demonstrated by the physicist Sir William Crookes.

Yet they omitted to mention the precisely shaped images of flowers, vases, seashells, fish, the serpent's head and a number of other forms that Tyndall's experiment produced.

Did Tyndall's own thoughts physically interfere with the experiment, or do the vapours of certain chemicals have a propensity to form images? No one at this point in time seems to know.

Tyndall, it must be realised, was a scientist of some repute, a Fellow and Director of the Royal Institute, President of the British Association, and disciple and confidant of Michael Faraday. He was a modest and charitable man, according to his peers, and his research work, writings and lectures were greatly appreciated by the scientific community. Not the sort of fellow who was wont to seeing things that weren't really there.

Another experiment sounding very similar to Tyndall's was performed by Sir Thomas Browne, a 17th-century physician and author. Browne called it, amongst other things, "Palingenesis...the re-individuality of an incinerated plant".

Browne, after reducing a plant to ashes by calcination, separated the salts from the ashes and after "special fermentation" placed the salts in a glass vial. He then made the following observations:

...by the heate of embers, or the natural heate of one's body, the very forme and idea [of the plant] will bee represented; whiche will suddenly vanish away, the heate being withdrawn from the bottom of the glasse.

A witness described the experiment as it was being performed on a flower:

...having...by calcination disengaged the salts from its ashes and deposited them [the salts] in a glass phial, a chemical mixture [reaction] acted on it, till in the fermentation they assumed a bluish and spectral hue. This dust, thus excited by heat, shoots upward into its primitive forms; by sympathy the parts unite and, while each is returning to its destined place, we see distinctly the stalk, the leaves and the flower arise; it is the pale spectre of a flower coming slowly forth from its ashes. The heat passes away, the magical scene declines, till the whole matter again precipitates itself into the chaos at the bottom. This vegetable phoenix thus lies concealed in its cold ashes.

NEWSCIENCE NEWSCIENCE NEWSCIENCE

Shades of Semyon Kirlian! Talk about photographing phantom leaves and limbs!

Imagine the revolution these experiments could cause in modern science. These experiments, if proved true, could present the unique possibility of being able to view nature's storehouse of "bio-blueprints" or "life ideas" before (and after) she clothes them in flesh.

Take forensic medicine, for example; burnt evidence could be visually resurrected. And in archaeology, those old ashes and coals of burnt remains could show us how the people actually lived (and died). And would the skin or bone samples of Egyptian mummies and other ancient people properly treated allow us to gaze once more on the finely chiselled features of beautiful Nefertiti, or see again that Hellenic smile that once launched a thousand ships?

Another interesting experiment, similar in some respects to those mentioned above (but not politically correct by today's animal welfare standards), was performed during the 1940s using the Wilson expansion cloud chamber. This chamber, which is filled with a gas or vapour (usually water vapour), is normally used to track the path of atomic and sub-atomic particles.

Dr R. A. Waters, director of the William Bernard Johnston Foundation for Psychological Research in Reno, Nevada, theorised that the human or animal soul

exists in the "intra-atomic space between the atoms of human cells". He decided to test his theory using the cloud chamber.

A large grasshopper was placed in the chamber and dispatched with ether. At the precise moment of death, expansion of the water vapour occurred, which in turn trig-

What other potentially world-shaking discoveries lie concealed and forgotten in dusty tomes, sitting in equally dusty, out-of-the-way bookshops and libraries?

gered a camera and a photograph was taken of the condensation figure. In all, around 40 experiments were carried out using frogs and white mice. According to Waters, in all the tests where the creature permanently died, a "shadow phenomenon" appeared in the chamber, even after eight hours of observation, coinciding with the shape of the creature. However, if the animal revived, no condensation figure would appear on the photograph.

Did Waters photograph the soul of those creatures? Is the soul more easily captured

on film as it is leaving its body (with some small amount of the material world still clinging to it) than some time afterwards?

A brief, tantalising account of a French scientist's experiments clearly shows how easily momentous discoveries can be made and then how, just as easily, they can fade into obscurity.

In 1856, Dr Jobard of Paris declared to a startled press:

I hold a discovery which frightens me. There are two kinds of electricity; one, brute and blind, is produced by the contact of metals and acids; the other is intelligent and clairvoyant. The brute [one] ...has followed Jacobii, Bonelli and Moncal, while the intellectual one was following Bois-Robert, Thilorier and Chevalier Duplanty.

The electrical ball or globular electricity [ball lightning?] contains a thought which disobeyes Newton [gravity?] and Mariotte [?] to follow its own freaks ... we have in the annals of the academy thousands of proofs of the intelligence of the electric bolt...but I remark that I am permitting myself to become indiscreet. A little more and I would have disclosed to you the key which is about to discover to us the universal spirit.

What other potentially world-shaking discoveries lie concealed and forgotten in dusty tomes sitting in equally dusty, out-of-the-way bookshops and libraries?

References

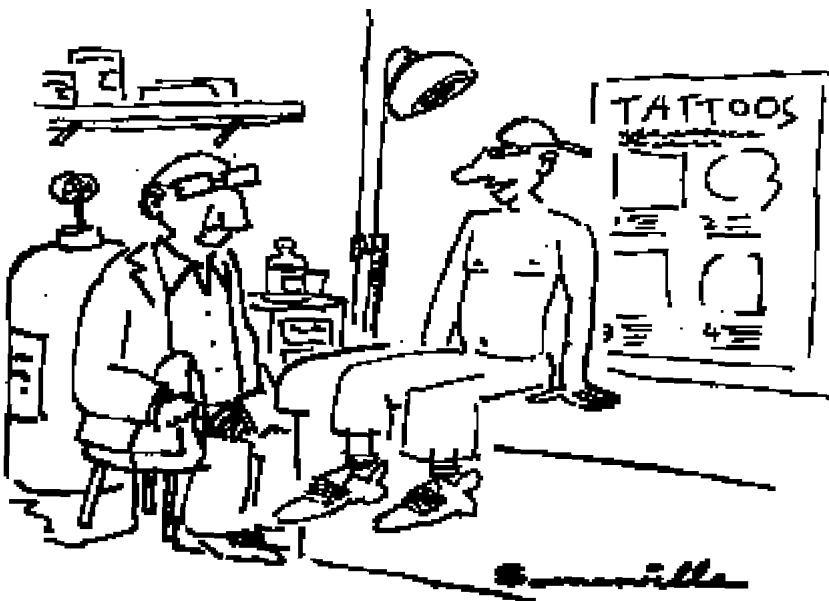
- *L'Ami des Sciences*, 2 March 1856, p. 56
- Sir Thomas Browne, *Works Vol. II*, London, 1883.
- S. W. Tromp, *Psychical Physics*, London, 1949.
- H. P. Blavatsky, *Isis Unveiled*, USA, 1877, 1950.

About the Author:

John Mount is a freelance writer based in southeast Queensland, Australia. He has been an avid collector of old books and manuscripts for over 30 years and his interests include alchemy, archaeology and philology. He can be emailed at jemount@globalfreeway.com.au.

Editor's Note:

John Mount's article was first published as "Forgotten Experiments" on *The Anomalist* website at www.anomalist.com/features/forgotten.html. His article, "Abiogenesis, or the Frankenstein Effect", was published in NEXUS 6/03 and another feature, "And There Were Giants", appears in *Twilight Zone* this issue.



"What transnational corporate logos do you do?"

NEWSCIENCE NEWSCIENCE NEWSCIENCE

A UNIFIED THEORY OF PHYSICS FROM THE 18TH CENTURY

by R. J. Anderton © 2001

Roger Boscovich (born in Dubrovnik, Yugoslavia, on 18 May 1711, and died in Milan, Italy, on 13 February 1797) had a career that is an anachronism in the history of science.¹ Physics in general at the time took its lead from Newton, and Boscovich's idiosyncrasy led him to take the opposite track to the majority.² Whenever words like "anachronism" are used, this means something strange is happening; it is a word sometimes used to describe Tesla, who seemed far ahead of his time. Boscovich is another example of a person far ahead of his time.

In a book written for the 250th anniversary of his birth, Boscovich is described as combining what we would now call relativistic ideas with quantum theory. The book, edited by Lancelot Law Whyte, admits that Boscovich had a unified theory of physics that combined the macroscopic scale with the microscopic.³

How can a unified physics theory be overlooked by mainstream physics? The answers are many and varied but, essentially, 20th-century physics has moved on from the ideas that Boscovich was dealing with.

The development of quantum mechanics from 1925, by Heisenberg, Bohr and company, made Boscovich and his theories seem irrelevant to the mainstream history of physics, and he and his ideas were thus omitted from orthodox science history.

The Whyte book admits that Boscovich had a unified physics theory, but says it is wrong.⁴ No clear reasoning is given as to why Boscovich's theory is wrong; the book just seems to assume that Boscovich's theory is wrong because it is not based upon the same quantum theory that was developed from the events of 1925–26.⁵

Interestingly, Einstein kept insisting that the theory of 1925–26 was wrong. He summed up his position in his book, *Out of My Later Years*:⁶

...in my opinion, the quantum theory [of 1925–26] does not seem likely to be able to produce a usable foundation for physics: one becomes involved in contradictions if one tries to consider the theoretical quantum description as a complete description of the individual physical system or happening.

It is well known that the theory of gener-

al relativity does not combine with quantum mechanics, as has often been pointed out by professors such as Hawking and Penrose.⁷ Maybe it would be a good idea to look at an earlier theory, dismissed by the mainstream physics community, that had its own version of quantum theory.

Only philosophers—not scientists—now

I was shocked to find Boscovich describing what we would today call "superstring theory" ...

bother to look at Boscovich, and the philosophers do not know what they are looking at. I was shocked to find Boscovich describing what we would today call "superstring theory", but he did not have the technical words that we have since developed in the past 200 years and was thus struggling to describe his theory.

Boscovich starts with talking about "physical point particles" which he called "puncta".⁸ He then goes on to define several other features, saying what is now interpreted as "the fields of elementary particles

have associated with them a length which appears in certain respects as a minimum; this is often loosely called 'the radius of the particle'". In effect, Boscovich was saying: "Treat all finite radii as properties not of single constituent entities, but of the laws of two-body interactions." As pointed out by Whyte, this suggests that physics should stop associating radii with single particles and only consider interacting pairs or sets;⁹ in other words, physics based on a "perfectly indivisible and non-extended point", treated as a quasi-material persisting centre of interaction.¹⁰

All of Boscovich's puncta are identical, so that the "mass" of any composite body is simply the number of puncta in it (actions being additive). Whyte says in his book that "this is an ordinary number which can be counted, not a dimensional quantity which must be measured in terms of extended units, like space or time".¹¹ I think

Whyte is in error here. But he makes amends when he says: "Boscovich, writing in Latin more than a century before the theory of dimensions was developed, could not say 'my theory is kinematic, everything being derived from spatio-temporal relations, not mechanical like Newton's'."¹²

A kinematic theory means a theory based on motion considered abstractly without reference to force or mass. Boscovich was trying to describe such a theory, and did not have the words; these did not come into existence until after his death.



NEWSCIENCE NEWSCIENCE NEWSCIENCE

His theory involved eliminating Newtonian mass as a primary quantity and substituting a kinematic basis.¹³ This means he was treating mass in the same way as Minkowski treated time in Einstein's theory. We now talk of four-dimensional space-time. Boscovich was treating mass as another dimension to go alongside space and time. Wesson in 1990 discussed treating mass in this manner.¹⁴

Boscovich is thus presenting us with an interesting idea. He is starting with a theory that has puncta (point particles), and then extending the theory to a wider theory that has bi-punctas (two point-objects joined together). In the "wider" theory, punctas or points by themselves do not exist; instead, bi-punctas exist. By treating space, time and mass as dimensions, then each point is defined by five dimensions, so the bi-puncta is defined by 10 dimensions. And with two points we can define a line: a one dimensional object.

So, Boscovich had a 10-dimensional theory built on fundamental objects we would now call "strings", which today is called superstring theory. These bi-punctas of Boscovich are thus foreshadowing the idea of strings. We have a natural progression from classical theory development through Boscovich, an idea that is a modern contender for a "theory of everything".

But modern physicists claim that the unification of physics is very difficult; they have not been able to achieve it. I am now convinced that Einstein is right: the quantum theory of 1925 is wrong, and physicists have been trying to combine the

wrong quantum theory. I am further convinced that Boscovich achieved unification of physics in the 18th century.

Modern physicists are looking for a much more complicated theory than that which Boscovich was describing.

We have a natural progression from classical theory development through Boscovich, an idea that is a modern contender for a "theory of everything".

So, how can a simpler theory be the answer? Well, let me explain with a few quotes.

According to Einstein:¹⁵

Most of the fundamental ideas of science are essentially simple, and may,

as a rule, be expressed in a language comprehensible to everyone.

Werner Heisenberg says something similar:¹⁶

Even for a physicist, the description, in plain language, will be a criterion of the degree of understanding that has been reached.

The simplicity of Boscovich's theory fulfills the criteria of Einstein and Heisenberg. I was easily able to describe it in a few words in this article.

Erwin Schrödinger agrees with Einstein and Heisenberg on the "simplicity" matter:¹⁷

If you cannot—in the long run—tell everyone what you have been doing, your doing has been worthless.

Now compare the complexity of modern physics based on quantum mechanics of 1925, with Boscovich's theory of the 18th century, and ask yourself which theory is easier to understand. I will give you a clue: Feynman—possibly the greatest physicist since Einstein—admits that no-one understands modern physics.¹⁸

The choice is between a 20th-century theory that no-one understands, and an 18th-century theory that has been discarded. I am convinced that the 18th-century theory wins the contest, hence the numerous problems we are experiencing in the 20th century, as highlighted in NEXUS Magazine. No-one properly understands the technology we are using.

Endnotes

1. *Dictionary of Scientific Biography vol. II* (Charles Coulston Gillispie, editor-in-chief), Charles Scribner's Sons, New York, 1970, p. 326.
2. *ibid.*, p. 330.
3. Lancelot Law Whyte (editor), *Roger Joseph Boscovich, SJ, FRS, 1711–1787: Studies of his Life and Works on the 250th Anniversary of his Birth* (foreword by Sir Harold Hartley), George Allen and Unwin, UK, 1961.
4. *ibid.* Ref. p. 102: "Boscovich presented a comprehensive theory of physics based on the principle that all phenomena arise from the spatial arrangements and relative displacements of identical point particles interacting by pairs under an oscillatory law determining their relative accelerations. This principle in his theory reduced to a single law the actions existing in nature."
5. *ibid.* Ref. p. 102: "By an historical irony, no sooner did the full significance of this principle [of Boscovich's theory] become clear than it was proved to be inadequate by the

- success of the de Broglie–Schrödinger wave particle." This is implying the Boscovich theory is wrong because it does not agree with quantum mechanics ideas of 1925 onwards.
6. Einstein, Albert, *Out of My Later Years*, Greenwood Press, USA, 1975 (revised reprint edition), © 1950, p. 97.
 7. For example: Hawking, S. A., *A Brief History of Time*, Guild Publishing, UK, 1999, p. 12, and Stachel J. Einstein's *Miraculous Year*, Princeton University Press, UK, 1998, p. xiii.
 8. Whyte, *Roger Joseph Boscovich*, *ibid.*, p. 106.
 9. *ibid.*, p. 123.
 10. *ibid.*, p. 105.
 11. *ibid.*, p. 107.
 12. *ibid.*
 13. *ibid.*, p. 119.
 14. Wesson, P. S., "Clarification of an Extended Theory of Gravity", *Gen. Rel. Grav.* 22(6):707-713.
 15. *The World of Physics Vol. 1* (Jefferson Hane Weaver, editor), Simon & Schuster, New

- York, 1987, p. 56: Albert Einstein, from "The Evolution of Physics".
16. *ibid.* Werner Heisenberg, from "Physics and Philosophy".
 17. *ibid.* Erwin Schrödinger, from "Science and Humanism".
 18. Feynman, Richard P., *QED: the strange story of light and matter*, Penguin Books, USA, 1985.

About the Author:

Roger Anderton has an honours degree in maths and physics and is a former telecommunications engineer. His published work includes *Relativity Investigations: Relationship between light and gravity, Vol. 1* (Minerva, 1999), and "Postulates for a ten-dimensional theory" (*Speculations in Science and Technology* 1994;17[4]:292-294). He has also set up a website, www.einsteinconspiracy.co.uk. For further information, email the author at R.J.Anderton@btinternet.com.